

CABIN AIR QUALITY SYSTEM

ABSTRACT OF THE DISCLOSURE

5 An air quality system comprising at least one air cleaner unit in communication with an interior air space. In one embodiment, an air quality system for an aircraft comprises a first set of air cleaner units in communication with a lower plenum of the aircraft recirculation system and a second set of air cleaner units in communication with an upper plenum of the aircraft recirculation system. Each air cleaner unit comprises at least one adsorbent unit in combination with at least one photocatalytic oxidation unit. In one embodiment, an air cleaner unit comprises a relatively weak adsorbent material upstream from a photocatalytic oxidation unit, and a relatively strong adsorbent material downstream from the photocatalytic oxidation unit. Methods for removing a pollutant from an air stream and for making an air cleaner unit are also disclosed.